

Amendments to the Claims:

1. (Currently Amended) A binary mask comprising: a quartz substrate; and a chrome pattern on the quartz substrate, wherein the quartz substrate includes at least one etch at a location at which the chrome pattern is not, wherein the at least one etch is sloped under the chrome pattern to enhance phase edge darkening effects.
2. (Original) A binary mask as recited in claim 1, wherein said at least one etch has a depth which corresponds to a phase shift of 180 degrees.
3. (Original) A binary mask as recited in claim 1, wherein the quartz substrate includes an etched pattern thereon.
4. (Original) A binary mask as recited in claim 3, wherein the etched pattern is located where the chrome pattern is not on the quartz substrate.
- 5-7. (Cancelled)
8. (Original) A binary mask as recited in claim 3, wherein the at least one etch has a depth which is selected such that the mask can be exposed with a given wavelength of exposure system.

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9. (Currently Amended) A method of manufacturing a binary mask, said method comprising: providing a quartz substrate having a chrome pattern thereon; and etching the quartz substrate under the chrome pattern to enhance phase edge darkening effects.
10. (Original) A method as recited in claim 9, wherein the step of etching the quartz substrate comprises etching at a depth which corresponds to a phase shift of 180 degrees.
11. (Original) A method as recited in claim 9, wherein the step of etching the quartz substrate comprises etching a pattern into the quartz substrate.
12. (Original) A method as recited in claim 9, wherein the step of etching the quartz substrate comprises etching where the chrome pattern is not on the quartz substrate.
13. (Original) A method as recited in claim 9, wherein the step of providing a quartz substrate having a chrome pattern thereon comprises coating a blank mask/resist onto a substrate of chrome and quartz, writing and developing a pattern into the chrome, and etching the chrome.
- 14-18. (Cancelled)

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19. (Original) A method as recited in claim 9, wherein the step of etching comprises etching to a depth which provides that the mask can be effectively exposed with a given wavelength of exposure system.

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